



Strength Products

Equipment Anchoring Guidelines

Johnson Health Tech designs its VISION strength products to be stable when used as designed. However, it is impossible to predict how users will ultimately use the products in all circumstances. Because of this, Johnson Health Tech recommends that all stationary VISION strength equipment be secured to the floor to stabilize equipment and eliminate rocking or tipping over.

It is the responsibility of the fitness facility to ensure that local or regional building codes are being adhered to.

REQUIREMENTS FOR ANCHORING EXERCISE EQUIPMENT

ALL FLOORING

- Do not reuse anchoring fasteners. Anchoring fasteners are intended for one time usage only.
- It is recommended to drill an additional 13 mm (1/2") of depth beyond the fastener length being used to ensure that debris does not block the entry of the anchor.
- Understand where all bolt-down plates are located on the exercise equipment and mark the locations prior to drilling holes into the floor.
- Understand the thickness/height of the exercise equipment's bolt-down plates. Add this height to the overall length of the anchoring fastener when selecting fastener length to ensure proper embedded depth into concrete flooring.
- Anchor the exercise equipment at all provided locations.

CONCRETE

- Concrete anchoring fasteners must have a minimum of 64 mm (2.5") embedded depth into concrete flooring to ensure maximum security and pull out force.

WOOD/TILE/RUBBER OVER CONCRETE SUB-FLOOR

- Understand the thickness of the flooring material. Add this height to the overall length of the anchoring fastener when selecting fastener length to ensure proper embedded depth into concrete flooring. The concrete anchoring fastener must have a minimum of 64 mm (2.5") embedded depth into concrete flooring to ensure maximum security and pull-out force.

Manufacturer recommends anchoring the VISION exercise equipment with Hilti-brand concrete anchor fasteners. Regardless of the fastener used, each anchoring fastener must withstand 3.3 kN (750 LBS) pull-out force.



Concrete Anchor – Floor Engagement Standard For use with Manufacture’s recommended Hilti-brand concrete anchor fasteners			
5 – 15 mm (typical) (3/16” – 5/8”)	Bolt-down Plate or Foot Thickness	The bolt-down plate thickness on VISION strength machines vary from machine to machine. This part of the fastener is not engaged with the concrete.	
13 mm (0.5”)	Allowance for upper flooring over concrete sub-floor	If upper flooring is thicker than this allowance, choose a longer concrete anchoring fastener.	
64 mm (2.5”)	64 mm (2.5”) Engagement into Concrete	Vision recommends a 64mm (2.5”) engagement into concrete. Regardless of the type of flooring, the anchoring fasteners use must be able to withstand a pull-out force of at least 3.3 kN (750 lbs)	
Remaining fastener length		Concrete fastener chosen should have a 64mm engagement into concrete as mentioned above. Any additional concrete engagement is acceptable.	

CAUTION: If it is possible that the length of your concrete anchoring fastener will not provide the minimum requirement of 64 mm (2.5”) of engagement, a longer anchor should be used.

TOOLS NEEDED

- Safety Glasses
- Permanent marker (fine tip) for marking hole locations
- Hammer Drill
- Impact Wrench
- 8 mm x 300 mm (3/8" x 12") Carbide Drill Bit (for 8 mm (3/8") Anchors)
- Recommended concrete anchoring fasteners (Choose one):

For Metric anchor:

Hilti brand Concrete Anchor: HUS-H 8x110 (Item #368732)

For Standard anchor:

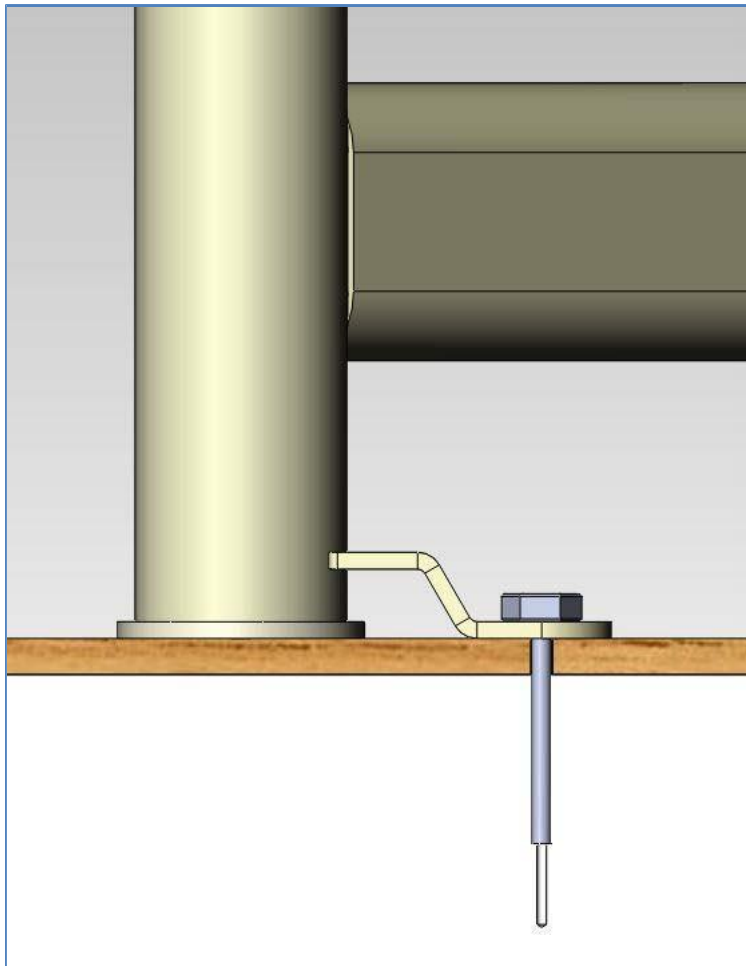
Hilti brand Concrete Anchor: KH-EZ 3/8" x 4" (Item# 418059)

- Canister of compressed air or Hand pump and hose (optional)
- Large Shim Washer (optional)

Follow instructions from anchoring fastener manufacturer for proper usage.

INSTALLATION PROCEDURE – This must be performed by a licensed contractor:

- 1) Place the exercise equipment where it is to be anchored to the floor.
- 2) Carefully mark all of the hole positions on the floor for every anchor point.
- 3) Ensure that every bolt-down plate or anchoring point on the equipment is utilized.
- 4) Move the exercise equipment out of the way for clear access to the floor.



- 5) Calculate required length of concrete anchor. Follow instructions from anchoring fastener manufacturer to choose proper length.
 - a. If using Hilti brand concrete anchors, minimum length of anchor should be:

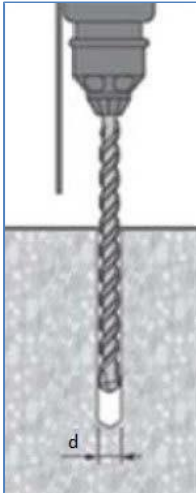
$$L_{\min} = 64 \text{ mm} + (\text{thickness of upper flooring material}) + (\text{thickness of foot})$$

$$L_{\min} = 2.5'' + (\text{thickness of upper flooring material}) + (\text{thickness of foot})$$
- 6) Calculate required hole depth. Hole depth:
 - a. Should ensure an embedded depth of the concrete anchor in the concrete to at least a depth of 64 mm (2.5").
 - b. Should be at least:

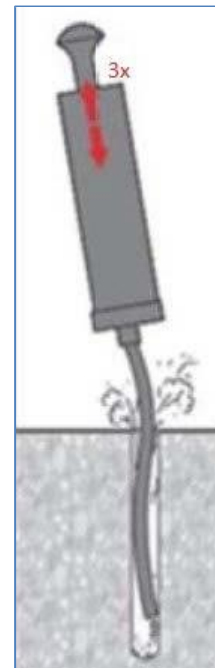
$$(\text{Length of Anchor fastener} + 13\text{mm extra depth}) - (\text{thickness of foot})$$

NOTE: 13 mm (0.5") extra depth provides extra clearance for any debris in hole.

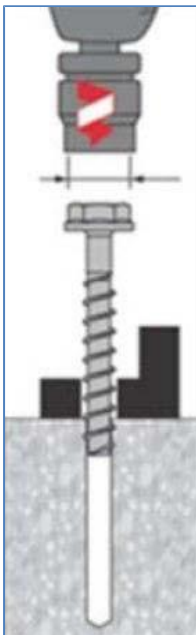
7) Wear safety glasses while drilling down into the floor.



8) Drill down into flooring to the calculated depth.



9) Recommended: If available, use canister of compressed air or hand-pump to blow debris out of the drilled holes.



10) Move equipment back into place and align holes in bolt-down plates with the drill holes in the floor.

11) If bolt-down plate or foot does not contact the mounting surface, DO NOT pull down with the fastener or anchor. Shim the bolt-down plate or foot with a large steel washer to close the gap if required.

12) Use impact wrench to insert concrete anchoring fastener into concrete. Torque to recommendations of anchor manufacturer. For Hilti concrete fastener, this torque would typically be to 54 Nm (40 Foot-Pounds) for an 8 mm anchor (3/8" anchor).

- 13) Ensure that the concrete anchoring fastener is fully seated against the bolt-down plate.
- 14) It is the responsibility of the fitness facility to ensure that all provided locations on the exercise equipment are anchored. Each anchoring fastener must be able to withstand a 3.3 kN (750 LBS) pull-out force.
- 15) Ensure that exercise equipment is stable and secure.

